

Amendments to the Drawings:

Pursuant to this paper, Replacement Sheets, labeled as such, for Figures 1-4 are submitted, such sheets designating Figures 1-4 as "Prior Art." Figures 5-8 are submitted as originally filed in accordance with recommendation from Examiner Price.

Accordingly, the objection to the drawings is respectfully traversed, and reconsideration and withdrawal of the objection requested.

REMARKS

I. Status of the Claims

Claims 1-10, inclusive, are pending in this application. Claim 1 is amended in this response.

II. Response to the 35 USC §103 Rejection

The rejection of claims 1-10, inclusive, as unpatentable over Applicants' prior art (APA) as represented by Figures 1-4 of this application in view of Laverman et al. (hereafter Laverman) (5,147,418); Lievens et al. (hereafter Lievens) (5,220,799); and Coolidge et al. (hereafter Coolidge) (5,372,497) is respectfully traversed.

It is important to a proper disposition of this application that it be clearly understood that in the context of a storage tank that has an external (original specification, hereafter spec., p. 5, l. 14) floating (original spec., p. 5, l. 15) roof which roof itself carries at least two vents there through (original spec., p. 6, l. 17) that are in fluid communication with the ambient atmosphere over that roof (original spec., p. 7, l. 30): the novel and unobvious steps of this invention are A) removing storage tank product vapor from below the external floating roof through a vent in the floating roof itself (original claim 1) in a controlled manner (original claim 1) while B) introducing an inert gas through another vent in the floating roof itself to prevent the formation of a vacuum inside the tank (original claim 1).

As admitted by the Examiner on p. 4 of the first office action, APA does not suggest steps A) and B) above in the foregoing context.

Laverman does not supply any of the deficiencies of APA.

Laverman is limited to an internal floating roof 32 (col. 2, ll. 50 and 51) that has no vents in it whatsoever. Laverman also requires a fixed roof 28 (col. 2, l. 50). Further, Laverman's floating roof never becomes stationary with liquid below it as does Applicants'.

There is no teaching in nor motivation supplied by Laverman to employ Applicants' claimed steps in the context of a floating external roof that carries its own vents.

Thus, original claim 1 was both novel over and unsuggested, directly or indirectly, by the teachings of Laverman. However, original claim 1 has been amended by this paper to further emphasize the patentable distinction of original claim 1 over Laverman. The presence of ambient atmosphere over the external roof is supported by the original spec., p. 5, l. 14. This also supports the roof being "external" in the sense that that term is used by Laverman. The step of enclosing at least one roof vent with a first housing is supported by Applicants' original disclosure in respect of housing 50, see p. 8, l. 15 and the disclosure in respect of original Figure 5. The step of enclosing at least one other roof vent with a second housing is supported by Applicants' original disclosure in respect of housing 70, see p. 9, ll. 24 and 25 and the disclosure in respect of original Figure 6. The step of closing all roof vents is supported by Applicants' original disclosure in respect of forming a vacuum inside the tank while withdrawing vapor there from, see p. 10, ll. 20-22, and the disclosure in respect of Figures 2, 5, and 6 that shows a total of two vents 22, one closed by housing 50, Figure 5, and the other closed by housing 70, Figure 6.

If one were to follow the teaching of Laverman objectively, viz., without any retroactive reliance on Applicants' disclosure, one would be led by Laverman to modify APA to employ a fixed roof over APA's floating roof. One would also be led by Laverman to leave vents to the atmosphere, e.g., Laverman's vents 40, open to the atmosphere at all times. This is precisely the opposite of Applicants' claimed process which closes all vents in a floating roof.

To follow the teaching of Laverman without using Applicants' disclosure as a map to follow, one would permanently seal Applicants' vents 22 in the floating roof, put a fixed roof over the floating roof to make it internal, install permanently open vents (Laverman vents 40) above the now internal floating roof, and suck tank product vapors from the space between the now internal

floating roof and the new external fixed roof. Briefly put, one objectively reading Laverman would make no use whatsoever of Applicants' vents 22 in the floating roof. Thus, Laverman in no way suggests or even implies the utilization of existing vents in an external floating roof, much less in the manner set forth in Applicants' claims.

In fact, Laverman teaches away from Applicants' invention by making no use whatsoever of vents in a floating roof.

Lievens relates to a buried gasoline storage tank that is not exposed on any of its sides or top to the ambient atmosphere. Lievens has at best only a fixed roof, and provides no suggestion in respect of a floating external roof carrying at least two vents. Lievens has no relation whatsoever to an atmospheric tank with a vented floating external roof, or the invention of Laverman which employs a floating internal roof.

Lievens, like Laverman, teaches away from Applicants' claimed method of using a vented floating external roof by requiring the use of a fixed roof.

Lievens does not even relate to Applicants' claimed process because Lievens only adds inert gas while withdrawing gasoline from the underground tank, Lievens col. 4, ll. 52-60 and col. 5, ll.35-50. This goes on without the removal of vapor from the underground tank until that tank is drained, col. 5, ll. 60-65. Lievens does not suggest the removal of product vapor during this time. Only when the underground tank is refilled from a tanker truck is product vapor removed into that tanker truck, col. 6, ll. 1-12. Filling of the underground tank will increase the pressure within the tank and will not cause a pressure drop in the head space of the tank so the equipment of Lievens, i.e., the back pressure regulator valve 26, will not introduce inert gas into the tank during the filling time period. In this regard Applicants' original claim 1 clearly distinguishes over Lievens by removing vapor while adding inert gas.

Accordingly, Lievens does not supply any of the deficiencies of APA or Laverman, and these three unrelated references, when taken alone or in any

combination, do not suggest, render obvious, or motivate one not relying on Applicants' disclosure to practice Applicants' claimed process.

Coolidge and its teaching in respect of igniting a pilot burner in an inert atmosphere is totally unrelated to Applicants' invention and the other prior art relied upon, and, therefore, supplies none of the deficiencies above noted in respect of that other prior art.

Thus, even after adding three disparate references to APA, the Examiner still does not have a fair suggestion of Applicants' claimed process.

Further, there is no motivation in these unrelated references themselves that they ought to be combined, much less that they could or should be combined to produce Applicants' results. The only possible motivation for combining these unrelated references is a total and utter reliance on Applicants' disclosure, and this is improper under the patent law.

The law does not allow an Examiner to plow through the prior art using Applicants' disclosure as a road map to guide him in picking here and there from unrelated prior art. The Examiner's combination of four essentially unrelated pieces of prior art is a blatant reconstruction of the prior art in light of Applicants' disclosure and is improper.

It has been continually held that references cannot be combined where, as here, there is no suggestion in any of the references themselves that they can be combined to produce Applicants' results, *Tietig v. Ladd*, 141 USPQ 372.

The combination of references relied upon is a clear attempt at the reconstruction of the prior art in light of Applicants' disclosure, and is not taught nor made obvious by the prior art itself, which is improper under the law, *In re Vogel et al* 150 USPQ 445, and *North Electric Co. v. U.S. et al.*, 150 USPQ 464.

After studying the prior art references and the manner in which the Examiner proposes to combine those references, there is no suggestion to be found in the references themselves that they can be or should be combined in the absence of reliance upon Applicants' disclosure which is improper under the law, *Ex parte Lennox*, 144 USPQ 224.

To urge that it is obvious to do what Applicants have done, in spite of the combination of no less than four separate pieces of prior art with such glaring gaps, is to assume the invention rather than to find the teaching or reason in the prior art itself which one skilled in the art needs under the law, In re Soli, 137 USPQ 797.

The Examiner's prior art combination does not in any way render Applicants' claimed invention obvious since the legal test is obviousness as a whole, not of pieces dissected out after considering Applicants' disclosure, Harpman v. Watson, 134 USPQ 169.

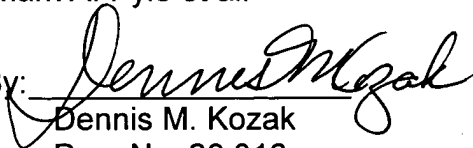
Since the Examiner, with the four separate pieces of prior art relied upon herein, has still not found nor provided the motivation for modifying the APA prior art to meet Applicants' claimed process, the burden of establishing a prima facie case of obviousness has clearly not been met.

Accordingly, reconsideration and withdrawal of this rejection is requested.

Wherefore, it is submitted that this case is now in order for immediate allowance, and such action is requested.

Respectfully submitted,

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